## **RAW SEQUENCE LISTING**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: /0/563,976 A

Source: /FUO

Date Processed by STIC: 6/30/06

# ENTERED



DATE: 06/30/2006

TIME: 10:24:39

**IFWO** 

```
Input Set : E:\HOI-14402.ST25.txt
                     Output Set: N:\CRF4\06302006\J563976A.raw
      3 <110> APPLICANT: Sorensen, Anders Per
             Benfield, Thomas Lars
             Lundgren, Jens Dilling
     5
             Kempe, Thomas D.
      8 <120> TITLE OF INVENTION: BINDING MEMBER TOWARDS PNEUMOCOCCUS SURFACE ADHESIN A
PROTEIN
              (PsaA)
     11 <130> FILE REFERENCE: HOI-14402/16
C--> 13 <140> CURRENT APPLICATION NUMBER: US/10/563,976A
G--> 13 <141> CURRENT FILING DATE: 2006-01-09
                                                                                      -17
     13 <150> PRIOR APPLICATION NUMBER: PCT/DK04/000492
     14 <151> PRIOR FILING DATE: 2004-07-08
     16 <150> PRIOR APPLICATION NUMBER: US 60/486,647
     17 <151> PRIOR FILING DATE: 2003-07-11
     19 <150> PRIOR APPLICATION NUMBER: PA 2003 01044
     20 <151> PRIOR FILING DATE: 2003-07-08
     22 <160> NUMBER OF SEQ ID NOS: 56
     24 <170> SOFTWARE: PatentIn version 3.3
     26 <210> SEQ ID NO: 1
     27 <211> LENGTH: 33
     28 <212> TYPE: DNA
     29 <213> ORGANISM: Homo sapiens
     32 <220> FEATURE:
     33 <221> NAME/KEY: CDS
     34 <222> LOCATION: (1)..(33)
     35 <223> OTHER INFORMATION: Sequence from human antibody generated in mouse.
     37 <400> SEQUENCE: 1
                                                                                33
     38 cgg gcg agt cag ggt att agc agc tgg tta gcc
     39 Arg Ala Ser Gln Gly Ile Ser Ser Trp Leu Ala
     40 1
     43 <210> SEQ ID NO: 2
     44 <211> LENGTH: 11
     45 <212> TYPE: PRT
     46 <213> ORGANISM: Homo sapiens
     48 <400> SEQUENCE: 2
     50 Arg Ala Ser Gln Gly Ile Ser Ser Trp Leu Ala
     54 <210> SEQ ID NO: 3
     55 <211> LENGTH: 21
     56 <212> TYPE: DNA
     57 <213> ORGANISM: Homo sapiens
     60 <220> FEATURE:
     61 <221> NAME/KEY: CDS
     62 <222> LOCATION: (1)..(21)
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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/563,976A

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Input Set : E:\HOI-14402.ST25.txt
                    Output Set: N:\CRF4\06302006\J563976A.raw
    63 <223> OTHER INFORMATION: Sequence from human antibody generated in mouse.
     65 <400> SEQUENCE: 3
                                                                              21
     66 qtt gca tcc agt ttg caa agt
    67 Val Ala Ser Ser Leu Gln Ser
    71 <210> SEQ ID NO: 4
    72 <211> LENGTH: 7
    73 <212> TYPE: PRT
     74 <213> ORGANISM: Homo sapiens
     76 <400> SEQUENCE: 4
     78 Val Ala Ser Ser Leu Gln Ser
     79 1
     82 <210> SEQ ID NO: 5
     83 <211> LENGTH: 27
     84 <212> TYPE: DNA
     85 <213> ORGANISM: Homo sapiens
     88 <220> FEATURE:
     89 <221> NAME/KEY: CDS
    90 <222> LOCATION: 5(1)...(27)
     91 <223> OTHER INFORMATION: Sequence from human antibody generated in mouse.
     93 <400> SEQUENCE: 5
                                                                              27
     94 caa cag tat aat agc tat cct ccg acg
     95 Gln Gln Tyr Asn Ser Tyr Pro Pro Thr
     99 <210> SEQ ID NO: 6
     100 <211> LENGTH: 9
     101 <212> TYPE: PRT
     102 <213> ORGANISM: Homo sapiens
     104 <400> SEQUENCE: 6
     106 Gln Gln Tyr Asn Ser Tyr Pro Pro Thr
     107 1
     110 <210> SEQ ID NO: 7
     111 <211> LENGTH: 321
     112 <212> TYPE: DNA
     113 <213 > ORGANISM: Homo sapiens
     116 <220> FEATURE:
     117 <221> NAME/KEY: CDS
     118 <222> LOCATION: (1)..(321)
     119 <223> OTHER INFORMATION: Sequence from human antibody generated in mouse. V-segment:
     120
              and J-segment: JK1
     122 <220> FEATURE:
W--> 123 <221> NAME/KEY: CDR1
     124 <222> LOCATION: (70)..(120)
     126 <220> FEATURE:
W--> 127 <221> NAME/KEY: CDR2
     128 <222> LOCATION: (148)..(168)
     130 <220> FEATURE:
W--> 131 <221> NAME/KEY: CDR3
     132 <222> LOCATION: (265)..(291)
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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/563,976A

RAW SEQUENCE LISTING DATE: 06/30/2006
PATENT APPLICATION: US/10/563,976A TIME: 10:24:39

Input Set : E:\HOI-14402.ST25.txt

Output Set: N:\CRF4\06302006\J563976A.raw

```
134 <400> SEQUENCE: 7
                                                                           48
135 qac atc caq atq acc caq tct cca tcc tca ctg tct gca tct gta gga
136 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
137 1
                                                                           96
139 gac aga gtc acc atc act tgt cgg gcg agt cag ggt att agc agc tgg
140 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Ser Trp
                20
143 tta gcc tgg tat cag cag aaa cca gag aaa gcc cct gag tcc ctg atc
                                                                          144
144 Leu Ala Trp Tyr Gln Gln Lys Pro Glu Lys Ala Pro Glu Ser Leu Ile
           35
147 tat gtt gca tcc agt ttg caa agt ggg gtc cca tca agg ttc agc ggc
                                                                          192
148 Tyr Val Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
        50
                            55
                                                                          240
151 agt gga tet ggg aca gat tte act etc acc atc agc agc etg cag ect
152 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
                        70
                                            75
155 gaa gat ttt gca act tat tac tgc caa cag tat aat agc tat cct ccg
                                                                          288
156 Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Tyr Asn Ser Tyr Pro Pro
                    85
                                      90
157
159 acg ttc ggc caa ggg acc aag gtg gaa atc aaa "
                                                                          321
160 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
                100
161
164 <210> SEQ ID NO: 8
165 <211> LENGTH: 107
166 <212> TYPE: PRT
167 <213> ORGANISM: Homo sapiens
169 <400> SEQUENCE: 8
171 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
                                        10
175 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Ser Trp
                20
                                    25
179 Leu Ala Trp Tyr Gln Gln Lys Pro Glu Lys Ala Pro Glu Ser Leu Ile
183 Tyr Val Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
187 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
                        70
191 Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Tyr Asn Ser Tyr Pro Pro
                    85
195 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
                                    105
196
                100
199 <210> SEQ ID NO: 9
200 <211> LENGTH: 15
201 <212> TYPE: DNA
202 <213> ORGANISM: Homo sapiens
205 <220> FEATURE:
206 <221> NAME/KEY: CDS
207 <222> LOCATION: (1)..(15)
208 <223> OTHER INFORMATION: Sequence from human antibody generated in mouse.
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## RAW SEQUENCE LISTING DATE: 06/30/2006 PATENT APPLICATION: US/10/563,976A TIME: 10:24:39

Input Set : E:\HOI-14402.ST25.txt

Output Set: N:\CRF4\06302006\J563976A.raw

```
210 <400> SEQUENCE: 9
211 ggt ttc tcc tgg agc
                                                                            15
212 Gly Phe Ser Trp Ser
213 1
216 <210> SEQ ID NO: 10
217 <211> LENGTH: 5
218 <212> TYPE: PRT
219 <213> ORGANISM: Homo sapiens
221 <400> SEQUENCE: 10
223 Gly Phe Ser Trp Ser
224 1
227 <210> SEQ ID NO: 11
228 <211> LENGTH: 51
229 <212> TYPE: DNA
230 <213> ORGANISM: Homo sapiens
233 <220> FEATURE:
234 <221> NAME/KEY: CDS
235 <222> LOCATION: (1)..(51)
236 <223> OTHER INFORMATION: Sequence from human antibody generated in mouse.
238 <400> SEQUENCE: 11
239 gaa atc gat tat aga gga agc acc aac tac aac ccg tcc ctc aag agt
240 Glu Ile Asp Tyr Arg Gly Ser Thr Asn Tyr Asn Pro Ser Leu Lys Ser
241 1
                    5
243 cga
                                                                            51
244 Arg
248 <210> SEQ ID NO: 12
249 <211> LENGTH: 17
250 <212> TYPE: PRT
251 <213> ORGANISM: Homo sapiens
253 <400> SEQUENCE: 12
255 Glu Ile Asp Tyr Arg Gly Ser Thr Asn Tyr Asn Pro Ser Leu Lys Ser
256 1
                    5
                                         10
259 Arg
263 <210> SEQ ID NO: 13
264 <211> LENGTH: 21
265 <212> TYPE: DNA
266 <213> ORGANISM: Homo sapiens
269 <220> FEATURE:
270 <221> NAME/KEY: CDS
271 <222> LOCATION: (1)..(21)
272 <223> OTHER INFORMATION: Sequence from human antibody generated in mouse.
274 <400> SEQUENCE: 13
275 ggg ggg ccc cgc ttt gac tac
                                                                            21
276 Gly Gly Pro Arg Phe Asp Tyr
277 1
280 <210> SEQ ID NO: 14
281 <211> LENGTH: 7
282 <212> TYPE: PRT
283 <213> ORGANISM: Homo sapiens
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RAW SEQUENCE LISTING DATE: 06/30/2006
PATENT APPLICATION: US/10/563,976A TIME: 10:24:39

Input Set : E:\HOI-14402.ST25.txt

Output Set: N:\CRF4\06302006\J563976A.raw

```
285 <400> SEQUENCE: 14
    287 Gly Gly Pro Arg Phe Asp Tyr
    291 <210> SEQ ID NO: 15
    292 <211> LENGTH: 345
    293 <212> TYPE: DNA
    294 <213> ORGANISM: Homo sapiens ... :
   · 297 <220> FEATURE:
    298 <221> NAME/KEY: CDS
    299 <222> LOCATION: (1)..(345)
    300 <223> OTHER INFORMATION: Sequence from human antibody generated in mouse.
          V-segment: 4-34, D-segment: unknown, J-segment: JH4b
    303 <220> FEATURE:
W--> 304 <221> NAME/KEY: CDR1
     305 <222> LOCATION: (91)..(102)
     307 <220> FEATURE:
W--> 308 <221> NAME/KEY: CDR2
     309 <222> LOCATION: (148)..(199)
     311 <220> FEATURE:
W--> 312 <221> NAME/KEY: CDR3
     313 <222> LOCATION: (191)..(312)
     315 <400> SEQUENCE: 15
                                                                                48
     316 cag gtg cga cta cag cag tgg ggc gca gga ctg ttg aag cct tcg gag
     317 Gln Val Arg Leu Gln Gln Trp Gly Ala Gly Leu Leu Lys Pro Ser Glu
                                                                                96
     320 acc ctg tcc ctc acc tgc gct gtc ttt ggt ggg tcc ttc agt ggt ttc
     321 Thr Leu Ser Leu Thr Cys Ala Val Phe Gly Gly Ser Phe Ser Gly Phe
                                         25
                                                                               144
     324 tcc tgg agc tgg atc cgc cag acc cca ggg aag ggg ctg gag tgg atc
     325 Ser Trp Ser Trp Ile Arg Gln Thr Pro Gly Lys Gly Leu Glu Trp Ile
                                     40
                                                                               192
     328 ggg gaa atc gat tat aga gga agc acc aac tac aac ccg tcc ctc aag
     329 Gly Glu Ile Asp Tyr Arg Gly Ser Thr Asn Tyr Asn Pro Ser Leu Lys
                                 55
             50
     330
     332 agt cga gtc acc ata tta aga gac acg tcc agg agc cag ttc tcc ctg
                                                                               240
     333 Ser Arg Val Thr Ile Leu Arg Asp Thr Ser Arg Ser Gln Phe Ser Leu
                             70
                                                                               288
     336 aag ttg agc tcc gtg acc gcc gcg gac tcg gct gtg ttt tat tgt gcg
     337 Lys Leu Ser Ser Val Thr Ala Ala Asp Ser Ala Val Phe Tyr Cys Ala
                         85
                                                                               336
     340 aga ggg ggg ccc cgc ttt gac tac tgg ggc cag gga acc ctg gtc acc
     341 Arg Gly Gly Pro Arg Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr
                                         105
     342
                                                                               345
     344 gtc tcc tca
     345 Val Ser Ser
                 115
     349 <210> SEQ ID NO: 16
     350 <211> LENGTH: 115
     351 <212> TYPE: PRT
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RAW SEQUENCE LISTING ERROR SUMMARY DATE: 06/30/2006 PATENT APPLICATION: US/10/563,976A TIME: 10:24:40

Input Set : E:\HOI-14402.ST25.txt

Output Set: N:\CRF4\06302006\J563976A.raw

#### Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:17; N Pos. 33 Seq#:23; N Pos. 102

### Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:17,18,25,26

VERIFICATION SUMMARYDATE: 06/30/2006PATENT APPLICATION: US/10/563,976ATIME: 10:24:40

Input Set : E:\HOI-14402.ST25.txt
Output Set: N:\CRF4\06302006\J563976A.raw

L:13 M:270 C: Current Application Number differs, Replaced Current Application No L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date L:123 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:7 L:127 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:7 L:131 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:7 L:304 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:15 L:308 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:15 L:312 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:15 L:407 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:0 L:495 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:23 L:504 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:23 L:508 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:23 L:520 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:96 L:694 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:31 L:698 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:31 L:702 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:31 L:875 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:39 L:879 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:39 L:883 M:257:W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID##39 L:1056 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:47 L:1060 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:47 L:1064 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:47